ELSEVIER

Journal of Nuclear Materials 231 (1996) 265–267

journal of nuclear materials

Author index

Abd El-Azim, M.E., Correlation between tensile and creep data in alloy 800H at 850°C 231 (1996) 146
Adelfang, P., see Pasqualini, E. 231 (1996) 173
Aizenshtein, M., see Venkert, A. 231 (1996) 254
Alimov, V.Kh., R.Kh. Zalavutdinov, A.E. Gorodetsky and A.P. Zakharov, Oxygen incorporation into B_4C and boronized graphite USB15 under D-ion bombardment in oxygen atmosphere 231 (1996) 69
Amarendra, G., see Rajaraman, R. 231 (1996) 55
Amaya, M., M. Hirai, T. Kubo and Y. Korei, Thermal conductivity measurements on 10 wt% Gd_2O_3 doped UO_{2+x} 231 (1996) 29
Anada, H., see Uno, M. 231 (1996) 34
Annen, A., A. von Keudell and W. Jacob, Erosion of amorphous hydrogenated boron–carbon thin films 231 (1996) 151
Anthonysamy, S., see Chandramouli, V. 231 (1996) 213
Arkush, R., see Venkert, A. 231 (1996) 254

Begg, B.D., see Dytlewski, N. 231 (1996) 257
Berdyshev, A.V., see Veshchunov, M.S. 231 (1996) 1
Bogdanov, V.V. and V.V. Zakurkin, Radiation-induced segregation in neutron-irradiated V–Fe alloys studied by Mössbauer spectroscopy 231 (1996) 162

Chandramouli, V., S. Anthonysamy, P.R. Vasudeva Rao, R. Divakar and D. Sundararaman, PVA aided microwave synthesis: A novel route for the production of nanocrystalline thoria powder 231 (1996) 213
Ciurchea, D., A.V. Pop, C. Gheorghiu, I. Furtună, M. Todică, A. Dinu and M. Roth, Texture, morphology and deformation mechanisms in β-transformed Zircaloy-4 231 (1996) 83
Coquerelle, M., see Spino, J. 231 (1996) 179

Davis, J.W., see Haasz, A.A. 231 (1996) 170
Dinu, A., see Ciurchea, D. 231 (1996) 83
Divakar, R., see Chandramouli, V. 231 (1996) 213
Dytlewski, N., E.R. Vance and B.D. Begg, Energy-recoil analysis of deuterium incorporated in Synroc by reaction with D_2O at 120 and 190°C [Comments on the paper by Hj. Matzke et al., Nucl. Instrum. Meth. B45 (1990) 194] 231 (1996) 257

Eadie, R.L., see Shek, G.K. 231 (1996) 221
Eral, M., see Tel, H. 231 (1996) 165

Fähnle, M., see Krimmel, H. 231 (1996) 159
Furtună, I., see Ciurchea, D. 231 (1996) 83

Gheorghiu, C., see Ciurchea, D. 231 (1996) 83
Gopinathan, K.P., see Rajaraman, R. 231 (1996) 55
Gopinathan, K.P., see Govindaraj, R. 231 (1996) 141
Gorodetsky, A.E., see Alimov, V.Kh. 231 (1996) 69
Govindaraj, R. and K.P. Gopinathan, Hf impurity and vacancy interaction in α-Zr 231 (1996) 141
Gündüz, G. and İ. Uslu, Powder characteristics and microstructure of uranium dioxide and uranium dioxide–gadolinium oxide fuel 231 (1996) 113

Haasz, A.A., B.V. Mech and J.W. Davis, Methane yield of pyrolytic graphite due to low-energy D^+ impact 231 (1996) 170
Hasegawa, A., G.E. Youngblood and R.H. Jones, Effect of irradiation on the microstructure of Nicalon fibers 231 (1996) 245
Hirai, M., see Amaya, M. 231 (1996) 29
Hodgson, E.R., see Leguey, T. 231 (1996) 191
Hofmann, P., see Veshchunov, M.S. 231 (1996) 1
Homma, K., see Mutoh, I. 231 (1996) 132
Huang, F.H., Container materials in environments of corroded spent nuclear fuel 231 (1996) 74
Huang, J., see Yamawaki, M. 231 (1996) 199

Ishii, T. and T. Mizuno, Thermal conductivity of cesium molybdate Cs_2MoO_4 231 (1996) 242

Jacob, W., see Annen, A. 231 (1996) 151
Johnson, P.B., K.L. Reader and R.W. Thomson, Transverse sections from helium-implanted copper using ultramicrotomy 231 (1996) 92
Jones, R.H., see Hasegawa, A. 231 (1996) 245
Jovanović, M.T., see Shek, G.K. 231 (1996) 221

Kamiyama, T., see Uno, M. 231 (1996) 34
Kéroack, D. and B. Terreault, Re-emission of deuterium implanted in carbon by laser desorption 231 (1996) 47
Kéroack, D., see Qian, C. 231 (1996) 39
Kim, Y.-H., see Park, H.-B. 231 (1996) 204
Korei, Y., see Amaya, M. 231 (1996) 29
Krimmel, H. and M. Fähnle, Properties of hydrogen isotopes in the tokamak plasma-facing material beryllium 231 (1996) 159
Kubo, T., see Amaya, M. 231 (1996) 29

Lee, B.-W., see Park, H.-B. 231 (1996) 204
Leguey, T., R. Pareja and E.R. Hodgson, Annealing of radiation-induced defects in vanadium and vanadium–titanium alloys 231 (1996) 191
Li, D., see Shek, G.K. 231 (1996) 221
Liu, J. and I. Neretnieks, A model for radiation energy deposition in natural uranium-bearing systems and its consequences to water radiolysis 231 (1996) 103

Ma, Y., see Shek, G.K. 231 (1996) 221
Matzke, Hj. and L.M. Wang, High-resolution transmission electron microscopy of ion irradiated uranium oxide 231 (1996) 155
Matzke, Hj. and V. Rigato, Hydrogen profiles at the surface of leached Synroc [Authors' reply to 'Comments on the paper by Hj. Matzke et al., Nucl. Instrum. Meth. B45 (1990) 194'] 231 (1996) 260
Mech, B.V., see Haasz, A.A. 231 (1996) 170
Miller, N.H., see Sunder, S. 231 (1996) 121
Miyake, C., see Uno, M. 231 (1996) 34
Mizuno, T., see Ishii, T. 231 (1996) 242
Mutoh, I., K. Homma, T. Tanabe and M. Nakamura, Corrosion behavior of single phase titanium–aluminum alloy in an impure helium environment 231 (1996) 132

Nakamura, M., see Mutoh, I. 231 (1996) 132
Neretnieks, I., see Liu, J. 231 (1996) 103

Pareja, R., see Leguey, T. 231 (1996) 191
Park, H.-B., Y.-H. Kim, B.-W. Lee and K.-S. Rheem, Effect of heat treatment on fatigue crack growth rate of Inconel 690 and Inconel 600 231 (1996) 204
Pasqualini, E., P. Adelfang and M.N. Regueiro, Carbon nanoencapsulation of uranium dicarbide 231 (1996) 173
Pop, A.V., see Ciurchea, D. 231 (1996) 83

Qian, C., B. Terreault and D. Kéroack, Deuterium transport in liquid beryllium 231 (1996) 39

Rajaraman, R., G. Amarendra, B. Viswanathan, C.S. Sundar and K.P. Gopinathan, Suppression of helium bubble growth in palladium by prior cold working 231 (1996) 55
Reader, K.L., see Johnson, P.B. 231 (1996) 92
Regueiro, M.N., see Pasqualini, E. 231 (1996) 173
Rheem, K.-S., see Park, H.-B. 231 (1996) 204
Rigato, V., see Matzke, Hj. 231 (1996) 260
Roth, M., see Ciurchea, D. 231 (1996) 83
Rybin, V.V., see Vasiliev, A.A. 231 (1996) 249

Sakurai, H., see Yamawaki, M. 231 (1996) 199
Schäfer, L., An austenitic steel remaining ductile after neutron irradiation 231 (1996) 63
Seahra, H., see Shek, G.K. 231 (1996) 221
Shamir, N., see Venkert, A. 231 (1996) 254
Shek, G.K., M.T. Jovanović, H. Seahra, Y. Ma, D. Li and R.L. Eadie, Hydride morphology and striation formation during delayed hydride cracking in Zr–2.5% Nb 231 (1996) 221
Shoji, T., see Yi, Y.S. 231 (1996) 20
Sivaprasad, P.V., see Vasudevan, M. 231 (1996) 231
Spino, J., K. Vennix and M. Coquerelle, Detailed characterisation of the rim microstructure in PWR fuels in the burn-up range 40–67 GWd/tM. 231 (1996) 179
Sundar, C.S., see Rajaraman, R. 231 (1996) 55
Sundararaman, D., see Chandramouli, V. 231 (1996) 213
Sunder, S. and N.H. Miller, Oxidation of CANDU uranium oxide fuel by air in gamma radiation at 150°C 231 (1996) 121
Suzuki, K., see Uno, M. 231 (1996) 34
Suzuki, Y., see Yamawaki, M. 231 (1996) 199

Tanabe, T., see Mutoh, I. 231 (1996) 132
Tel, H. and M. Eral, Investigation of production conditions and powder properties of AUC 231 (1996) 165
Terreault, B., see Qian, C. 231 (1996) 39
Terreault, B., see Kéroack, D. 231 (1996) 47
Thomson, R.W., see Johnson, P.B. 231 (1996) 92
Todică, M., see Ciurchea, D. 231 (1996) 83

Uno, M., T. Kamiyama, H. Anada, C. Miyake and K. Suzuki, Small angle X-ray scattering of small precipitates in Zircaloy 231 (1996) 34
Uslu, İ., see Gündüz, G. 231 (1996) 113

Vance, E.R., see Dytlewski, N. 231 (1996) 257
Vasiliev, A.A., V.V. Rybin and A.A. Zisman, The nature of the phosphorus atom mobility in bcc iron irradiated at low temperatures 231 (1996) 249
Vasudevan, M., S. Venkadesan and P.V. Sivaprasad, Influence of Ti/(C + 6/7N) ratio on the recrystallization behaviour of a cold worked 15Cr–15Ni–2.2Mo–Ti modified austenitic stainless steel 231 (1996) 231
Vasudeva Rao, P.R., see Chandramouli, V. 231 (1996) 213
Venkadesan, S., see Vasudevan, M. 231 (1996) 231
Venkert, A., M. Aizenshtein, R. Arkush and N. Shamir, Stress induced preferential oxidation at the uranium–uranium carbide interface 231 (1996) 254
Vennix, K., see Spino, J. 231 (1996) 179
Veshchunov, M.S., P. Hofmann and A.V. Berdyshev, Critical evaluation of uranium oxide dissolution by molten Zircaloy in different crucible tests 231 (1996) 1
Viswanathan, B., see Rajaraman, R. 231 (1996) 55
von Keudell, A., see Annen, A. 231 (1996) 151

Wang, L.M., see Matzke, Hj. 231 (1996) 155

Yamaguchi, K., see Yamawaki, M. 231 (1996) 199
Yamawaki, M., J. Huang, K. Yamaguchi, M. Yasumoto, H. Sakurai and Y. Suzuki, Investigation of the vaporization of $BaUO_3$ by means of mass spectrometry 231 (1996) 199
Yasumoto, M., see Yamawaki, M. 231 (1996) 199

Yi, Y.S. and T. Shoji, Detection and evaluation of material degradation of thermally aged duplex stainless steels: electrochemical polarization test and AFM surface analysis 231 (1996) 20
Youngblood, G.E., see Hasegawa, A. 231 (1996) 245
Zakharov, A.P., see Alimov, V.Kh. 231 (1996) 69
Zakurkin, V.V., see Bogdanov, V.V. 231 (1996) 162
Zalavutdinov, R.Kh., see Alimov, V.Kh. 231 (1996) 69
Zisman, A.A., see Vasiliev, A.A. 231 (1996) 249

ELSEVIER

Journal of Nuclear Materials 231 (1996) 268–272

journal of nuclear materials

Subject index

Age Hardening
Detection and evaluation of material degradation of thermally aged duplex stainless steels: electrochemical polarization test and AFM surface analysis, Y.S. Yi and T. Shoji 231 (1996) 20

Aluminum, Aluminum Alloys and Compounds
Corrosion behavior of single phase titanium–aluminum alloy in an impure helium environment, I. Mutoh, K. Homma, T. Tanabe and M. Nakamura 231 (1996) 132

Analytical Instruments and Methods
Suppression of helium bubble growth in palladium by prior cold working, R. Rajaraman, G. Amarendra, B. Viswanathan, C.S. Sundar and K.P. Gopinathan 231 (1996) 55
Hf impurity and vacancy interaction in α-Zr, R. Govindaraj and K.P. Gopinathan 231 (1996) 141
Radiation-induced segregation in neutron-irradiated V–Fe alloys studied by Mössbauer spectroscopy, V.V. Bogdanov and V.V. Zakurkin 231 (1996) 162
Energy-recoil analysis of deuterium incorporated in Synroc by reaction with D_2O at 120 and 190°C [Comments on the paper by Hj. Matzke et al., Nucl. Instrum. Meth. B45 (1990) 194], N. Dytlewski, E.R. Vance and B.D. Begg 231 (1996) 257
Hydrogen profiles at the surface of leached Synroc [Authors' reply to 'Comments on the paper by Hj. Matzke et al., Nucl. Instrum. Meth. B45 (1990) 194'], Hj. Matzke and V. Rigato 231 (1996) 260

Beryllium, Beryllium Alloys and Compounds
Deuterium transport in liquid beryllium, C. Qian, B. Terreault and D. Kéroack 231 (1996) 39
Properties of hydrogen isotopes in the tokamak plasma-facing material beryllium, H. Krimmel and M. Fähnle 231 (1996) 159

Breeding Materials
Radiation-induced segregation in neutron-irradiated V–Fe alloys studied by Mössbauer spectroscopy, V.V. Bogdanov and V.V. Zakurkin 231 (1996) 162

Carbon
Re-emission of deuterium implanted in carbon by laser desorption, D. Kéroack and B. Terreault 231 (1996) 47
Erosion of amorphous hydrogenated boron–carbon thin films, A. Annen, A. von Keudell and W. Jacob 231 (1996) 151
Methane yield of pyrolytic graphite due to low-energy D^+ impact, A.A. Haasz, B.V. Mech and J.W. Davis 231 (1996) 170
Carbon nanoencapsulation of uranium dicarbide, E. Pasqualini, P. Adelfang and M.N. Regueiro 231 (1996) 173

Ceramics *(not listed elsewhere)*
Energy-recoil analysis of deuterium incorporated in Synroc by reaction with D_2O at 120 and 190°C [Comments on the paper by Hj. Matzke et al., Nucl. Instrum. Meth. B45 (1990) 194], N. Dytlewski, E.R. Vance and B.D. Begg 231 (1996) 257
Hydrogen profiles at the surface of leached Synroc [Authors' reply to 'Comments on the paper by Hj. Matzke et al., Nucl. Instrum. Meth. B45 (1990) 194'], Hj. Matzke and V. Rigato 231 (1996) 260

Chemical Reactions *(includes Electrochemical and Thermochemical Reactions)*
Detection and evaluation of material degradation of thermally aged duplex stainless steels: electrochemical polarization test and AFM surface analysis, Y.S. Yi and T. Shoji 231 (1996) 20
Oxidation of CANDU uranium oxide fuel by air in gamma radiation at 150°C, S. Sunder and N.H. Miller 231 (1996) 121
Stress induced preferential oxidation at the uranium–uranium carbide interface, A. Venkert, M. Aizenshtein, R. Arkush and N. Shamir 231 (1996) 254

Cladding Materials
Hydride morphology and striation formation during delayed hydride cracking in Zr–2.5% Nb, G.K. Shek, M.T. Jovanović, H. Seahra, Y. Ma, D. Li and R.L. Eadie 231 (1996) 221

Cold-Worked Materials
Suppression of helium bubble growth in palladium by prior cold working, R. Rajaraman, G. Amarendra, B. Viswanathan, C.S. Sundar and K.P. Gopinathan 231 (1996) 55

Compatibility and Corrosion *(includes Stress Corrosion Cracking)*
Container materials in environments of corroded spent nuclear fuel, F.H. Huang 231 (1996) 74
Corrosion behavior of single phase titanium–aluminum alloy in an impure helium environment, I. Mutoh, K. Homma, T. Tanabe and M. Nakamura 231 (1996) 132
Stress induced preferential oxidation at the uranium–uranium carbide interface, A. Venkert, M. Aizenshtein, R. Arkush and N. Shamir 231 (1996) 254

Composite Materials
Effect of irradiation on the microstructure of Nicalon fibers, A. Hasegawa, G.E. Youngblood and R.H. Jones 231 (1996) 245

Copper, Copper Alloys and Compounds
Transverse sections from helium-implanted copper using ultramicrotomy, P.B. Johnson, K.L. Reader and R.W. Thomson 231 (1996) 92

Creep and Stress Relaxation
Correlation between tensile and creep data in alloy 800H at 850°C, M.E. Abd El-Azim 231 (1996) 146

Defects and Defect Structures *(excludes by Irradiation)*
Hf impurity and vacancy interaction in α-Zr, R. Govindaraj and K.P. Gopinathan 231 (1996) 141

Deformation
Texture, morphology and deformation mechanisms in β-transformed Zircaloy-4, D. Ciurchea, A.V. Pop, C. Gheorghiu, I. Furtună, M. Todică, A. Dinu and M. Roth 231 (1996) 83

Dislocations
High-resolution transmission electron microscopy of ion irradiated uranium oxide, Hj. Matzke and L.M. Wang 231 (1996) 155

Electron Irradiation
Annealing of radiation-induced defects in vanadium and vanadium–titanium alloys, T. Leguey, R. Pareja and E.R. Hodgson 231 (1996) 191

Embrittlement
Detection and evaluation of material degradation of thermally aged duplex stainless steels: electrochemical polarization test and AFM surface analysis, Y.S. Yi and T. Shoji 231 (1996) 20

Experimental Techniques
Transverse sections from helium-implanted copper using ultramicrotomy, P.B. Johnson, K.L. Reader and R.W. Thomson 231 (1996) 92

Fabrication
Investigation of production conditions and powder properties of AUC, H. Tel and M. Eral 231 (1996) 165
PVA aided microwave synthesis: A novel route for the production of nanocrystalline thoria powder, V. Chandramouli, S. Anthonysamy, P.R. Vasudeva Rao, R. Divakar and D. Sundararaman 231 (1996) 213
Influence of $Ti/(C + 6/7N)$ ratio on the recrystallization behaviour of a cold worked 15Cr–15Ni–2.2Mo–Ti modified austenitic stainless steel, M. Vasudevan, S. Venkadesan and P.V. Sivaprasad 231 (1996) 231

Fast Reactors
Container materials in environments of corroded spent nuclear fuel, F.H. Huang 231 (1996) 74

Fatigue
Effect of heat treatment on fatigue crack growth rate of Inconel 690 and Inconel 600, H.-B. Park, Y.-H. Kim, B.-W. Lee and K.-S. Rheem 231 (1996) 204

First Wall Materials
Oxygen incorporation into B_4C and boronized graphite USB15 under D-ion bombardment in oxygen atmosphere, V.Kh. Alimov, R.Kh. Zalavutdinov, A.E. Gorodetsky and A.P. Zakharov 231 (1996) 69
Effect of irradiation on the microstructure of Nicalon fibers, A. Hasegawa, G.E. Youngblood and R.H. Jones 231 (1996) 245

Fission Products
Investigation of the vaporization of $BaUO_3$ by means of mass spectrometry, M. Yamawaki, J. Huang, K. Yamaguchi, M. Yasumoto, H. Sakurai and Y. Suzuki 231 (1996) 199
Thermal conductivity of cesium molybdate Cs_2MoO_4, T. Ishii and T. Mizuno 231 (1996) 242

Fracture and Fracture Toughness
Hydride morphology and striation formation during delayed hydride cracking in Zr–2.5% Nb, G.K. Shek, M.T. Jovanović, H. Seahra, Y. Ma, D. Li and R.L. Eadie 231 (1996) 221

Fuels and Fuel Elements
Powder characteristics and microstructure of uranium dioxide and uranium dioxide–gadolinium oxide fuel, G. Gündüz and İ. Uslu 231 (1996) 113
Oxidation of CANDU uranium oxide fuel by air in gamma radiation at 150°C, S. Sunder and N.H. Miller 231 (1996) 121
Carbon nanoencapsulation of uranium dicarbide, E. Pasqualini, P. Adelfang and M.N. Regueiro 231 (1996) 173

Heat Treatment
Effect of heat treatment on fatigue crack growth rate of Inconel 690 and Inconel 600, H.-B. Park, Y.-H. Kim, B.-W. Lee and K.-S. Rheem 231 (1996) 204

Helium
Suppression of helium bubble growth in palladium by prior cold working, R. Rajaraman, G. Amarendra, B. Viswanathan, C.S. Sundar and K.P. Gopinathan 231 (1996) 55
Corrosion behavior of single phase titanium–aluminum alloy in an impure helium environment, I. Mutoh, K. Homma, T. Tanabe and M. Nakamura 231 (1996) 132
Erosion of amorphous hydrogenated boron–carbon thin films, A. Annen, A. von Keudell and W. Jacob 231 (1996) 151

High Temperature Reactors
Corrosion behavior of single phase titanium–aluminum alloy in an impure helium environment, I. Mutoh, K. Homma, T. Tanabe and M. Nakamura 231 (1996) 132

Hydrogen and Hydrides *(includes Deuterium and Deuterides)*
Deuterium transport in liquid beryllium, C. Qian, B. Terreault and D. Kéroack 231 (1996) 39
Re-emission of deuterium implanted in carbon by laser desorption, D. Kéroack and B. Terreault 231 (1996) 47
Erosion of amorphous hydrogenated boron–carbon thin films, A. Annen, A. von Keudell and W. Jacob 231 (1996) 151
Properties of hydrogen isotopes in the tokamak plasma-facing material beryllium, H. Krimmel and M. Fähnle 231 (1996) 159
Hydride morphology and striation formation during delayed hydride cracking in Zr–2.5% Nb, G.K. Shek, M.T. Jovanović, H. Seahra, Y. Ma, D. Li and R.L. Eadie 231 (1996) 221
Energy-recoil analysis of deuterium incorporated in Synroc by reaction with D_2O at 120 and 190°C [Comments on the paper by Hj. Matzke et al., Nucl. Instrum. Meth. B45 (1990) 194], N. Dytlewski, E.R. Vance and B.D. Begg 231 (1996) 257
Hydrogen profiles at the surface of leached Synroc [Authors' reply to 'Comments on the paper by Hj. Matzke et al., Nucl. Instrum. Meth. B45 (1990) 194'], Hj. Matzke and V. Rigato 231 (1996) 260

Impurities
Oxygen incorporation into B_4C and boronized graphite USB15 under D-ion bombardment in oxygen atmosphere, V.Kh. Alimov, R.Kh. Zalavutdinov, A.E. Gorodetsky and A.P. Zakharov 231 (1996) 69
Hf impurity and vacancy interaction in α-Zr, R. Govindaraj and K.P. Gopinathan 231 (1996) 141

Ion Irradiation
Re-emission of deuterium implanted in carbon by laser desorption, D. Kéroack and B. Terreault 231 (1996) 47
Oxygen incorporation into B_4C and boronized graphite USB15 under D-ion bombardment in oxygen atmosphere, V.Kh. Alimov, R.Kh. Zalavutdinov, A.E. Gorodetsky and A.P. Zakharov 231 (1996) 69
Transverse sections from helium-implanted copper using ultramicrotomy, P.B. Johnson, K.L. Reader and R.W. Thomson 231 (1996) 92
High-resolution transmission electron microscopy of ion irradiated uranium oxide, Hj. Matzke and L.M. Wang 231 (1996) 155
Methane yield of pyrolytic graphite due to low-energy D^+ impact, A.A. Haasz, B.V. Mech and J.W. Davis 231 (1996) 170
Stress induced preferential oxidation at the uranium–uranium carbide interface, A. Venkert, M. Aizenshtein, R. Arkush and N. Shamir 231 (1996) 254
Energy-recoil analysis of deuterium incorporated in Synroc by reaction with D_2O at 120 and 190°C [Comments on the paper by Hj. Matzke et al., Nucl. Instrum. Meth. B45 (1990) 194], N. Dytlewski, E.R. Vance and B.D. Begg 231 (1996) 257
Hydrogen profiles at the surface of leached Synroc [Authors' reply to 'Comments on the paper by Hj. Matzke et al., Nucl. Instrum. Meth. B45 (1990) 194'], Hj. Matzke and V. Rigato 231 (1996) 260

Iron, Iron Alloys *(excludes Steels)* **and Compounds**
Correlation between tensile and creep data in alloy 800H at 850°C, M.E. Abd El-Azim 231 (1996) 146
The nature of the phosphorus atom mobility in bcc iron irradiated at low temperatures, A.A. Vasiliev, V.V. Rybin and A.A. Zisman 231 (1996) 249

Kinetics
Critical evaluation of uranium oxide dissolution by molten Zircaloy in different crucible tests, M.S. Veshchunov, P. Hofmann and A.V. Berdyshev 231 (1996) 1

Liquid Metals
Deuterium transport in liquid beryllium, C. Qian, B. Terreault and D. Kéroack 231 (1996) 39

Mechanical Properties *(not listed elsewhere)*
An austenitic steel remaining ductile after neutron irradiation, L. Schäfer 231 (1996) 63
Correlation between tensile and creep data in alloy 800H at 850°C, M.E. Abd El-Azim 231 (1996) 146
Detailed characterisation of the rim microstructure in PWR fuels in the burn-up range 40–67 GWd/tM., J. Spino, K. Vennix and M. Coquerelle 231 (1996) 179

Metals, Alloys and Compounds *(not listed elsewhere)*
Suppression of helium bubble growth in palladium by prior cold working, R. Rajaraman, G. Amarendra, B. Viswanathan, C.S. Sundar and K.P. Gopinathan 231 (1996) 55

Microstructure and Texture *(excludes by Irradiation)*
Texture, morphology and deformation mechanisms in β-transformed Zircaloy-4, D. Ciurchea, A.V. Pop, C. Gheorghiu, I. Furtună, M. Todică, A. Dinu and M. Roth 231 (1996) 83
Powder characteristics and microstructure of uranium dioxide and uranium dioxide–gadolinium oxide fuel, G. Gündüz and İ. Uslu 231 (1996) 113

Neutron Irradiation
An austenitic steel remaining ductile after neutron irradiation, L. Schäfer 231 (1996) 63
Effect of irradiation on the microstructure of Nicalon fibers, A. Hasegawa, G.E. Youngblood and R.H. Jones 231 (1996) 245

Nickel, Nickel Alloys and Compounds
Correlation between tensile and creep data in alloy 800H at 850°C, M.E. Abd El-Azim 231 (1996) 146
Effect of heat treatment on fatigue crack growth rate of Inconel 690 and Inconel 600, H.-B. Park, Y.-H. Kim, B.-W. Lee and K.-S. Rheem 231 (1996) 204

Phase Transformation *(includes Evaporation, Sublimation)*
Thermal conductivity of cesium molybdate Cs_2MoO_4, T. Ishii and T. Mizuno 231 (1996) 242

Physical Properties *(not listed elsewhere)*
Properties of hydrogen isotopes in the tokamak plasma-facing material beryllium, H. Krimmel and M. Fähnle 231 (1996) 159

Plasma–Materials Interaction
Deuterium transport in liquid beryllium, C. Qian, B. Terreault and D. Kéroack 231 (1996) 39
Re-emission of deuterium implanted in carbon by laser desorption, D. Kéroack and B. Terreault 231 (1996) 47
Methane yield of pyrolytic graphite due to low-energy D^+ impact, A.A. Haasz, B.V. Mech and J.W. Davis 231 (1996) 170

Pores *(includes Porosity, Fabrication Pores)*
Detailed characterisation of the rim microstructure in PWR fuels in the burn-up range 40–67 GWd/tM., J. Spino, K. Vennix and M. Coquerelle 231 (1996) 179

Powder Processes and Products
Investigation of production conditions and powder properties of AUC, H. Tel and M. Eral 231 (1996) 165

Precipitates and Precipitation
Small angle X-ray scattering of small precipitates in Zircaloy, M. Uno, T. Kamiyama, H. Anada, C. Miyake and K. Suzuki 231 (1996) 34

Radiation Effects: Atomic Defects
Annealing of radiation-induced defects in vanadium and vanadium–titanium alloys, T. Leguey, R. Pareja and E.R. Hodgson 231 (1996) 191
The nature of the phosphorus atom mobility in bcc iron irradiated at low temperatures, A.A. Vasiliev, V.V. Rybin and A.A. Zisman 231 (1996) 249

Radiation Effects: Extended Defects, Microstructures
Detailed characterisation of the rim microstructure in PWR fuels in the burn-up range 40–67 GWd/tM., J. Spino, K. Vennix and M. Coquerelle 231 (1996) 179
Effect of irradiation on the microstructure of Nicalon fibers, A. Hasegawa, G.E. Youngblood and R.H. Jones 231 (1996) 245

Radiolysis
A model for radiation energy deposition in natural uranium-bearing systems and its consequences to water radiolysis, J. Liu and I. Neretnieks 231 (1996) 103

Steels, Austenitic
Detection and evaluation of material degradation of thermally aged duplex stainless steels: electrochemical polarization test and AFM surface analysis, Y.S. Yi and T. Shoji 231 (1996) 20
An austenitic steel remaining ductile after neutron irradiation, L. Schäfer 231 (1996) 63
Container materials in environments of corroded spent nuclear fuel, F.H. Huang 231 (1996) 74
Influence of $Ti/(C + 6/7N)$ ratio on the recrystallization behaviour of a cold worked 15Cr–15Ni–2.2Mo–Ti modified austenitic stainless steel, M. Vasudevan, S. Venkadesan and P.V. Sivaprasad 231 (1996) 231

Surface Effects
Erosion of amorphous hydrogenated boron–carbon thin films, A. Annen, A. von Keudell and W. Jacob 231 (1996) 151
Methane yield of pyrolytic graphite due to low-energy D^+ impact, A.A. Haasz, B.V. Mech and J.W. Davis 231 (1996) 170

Theory and Modelling
Critical evaluation of uranium oxide dissolution by molten Zircaloy in different crucible tests, M.S. Veshchunov, P. Hofmann and A.V. Berdyshev 231 (1996) 1
The nature of the phosphorus atom mobility in bcc iron irradiated at low temperatures, A.A. Vasiliev, V.V. Rybin and A.A. Zisman 231 (1996) 249

Thermodynamic Properties
Investigation of the vaporization of $BaUO_3$ by means of mass spectrometry, M. Yamawaki, J. Huang, K. Yamaguchi, M. Yasumoto, H. Sakurai and Y. Suzuki 231 (1996) 199

Thermomechanical Treatment
Influence of Ti/(C + 6/7N) ratio on the recrystallization behaviour of a cold worked 15Cr–15Ni–2.2Mo–Ti modified austenitic stainless steel, M. Vasudevan, S. Venkadesan and P.V. Sivaprasad 231 (1996) 231

Thermophysical Properties
Thermal conductivity measurements on 10 wt% Gd_2O_3 doped UO_{2+x}, M. Amaya, M. Hirai, T. Kubo and Y. Korei 231 (1996) 29
Thermal conductivity of cesium molybdate Cs_2MoO_4, T. Ishii and T. Mizuno 231 (1996) 242

Thorium, Thorium Alloys and Compounds
PVA aided microwave synthesis: A novel route for the production of nanocrystalline thoria powder, V. Chandramouli, S. Anthonysamy, P.R. Vasudeva Rao, R. Divakar and D. Sundararaman 231 (1996) 213

Titanium, Titanium Alloys and Compounds
Corrosion behavior of single phase titanium–aluminum alloy in an impure helium environment, I. Mutoh, K. Homma, T. Tanabe and M. Nakamura 231 (1996) 132

Uranium, Uranium Alloys and Compounds
Critical evaluation of uranium oxide dissolution by molten Zircaloy in different crucible tests, M.S. Veshchunov, P. Hofmann and A.V. Berdyshev 231 (1996) 1
Thermal conductivity measurements on 10 wt% Gd_2O_3 doped UO_{2+x}, M. Amaya, M. Hirai, T. Kubo and Y. Korei 231 (1996) 29
A model for radiation energy deposition in natural uranium-bearing systems and its consequences to water radiolysis, J. Liu and I. Neretnieks 231 (1996) 103
Oxidation of CANDU uranium oxide fuel by air in gamma radiation at 150°C, S. Sunder and N.H. Miller 231 (1996) 121
High-resolution transmission electron microscopy of ion irradiated uranium oxide, Hj. Matzke and L.M. Wang 231 (1996) 155
Investigation of production conditions and powder properties of AUC, H. Tel and M. Eral 231 (1996) 165
Carbon nanoencapsulation of uranium dicarbide, E. Pasqualini, P. Adelfang and M.N. Regueiro 231 (1996) 173
Detailed characterisation of the rim microstructure in PWR fuels in the burn-up range 40–67 GWd/tM., J. Spino, K. Vennix and M. Coquerelle 231 (1996) 179
Investigation of the vaporization of $BaUO_3$ by means of mass spectrometry, M. Yamawaki, J. Huang, K. Yamaguchi, M. Yasumoto, H. Sakurai and Y. Suzuki 231 (1996) 199
Stress induced preferential oxidation at the uranium–uranium carbide interface, A. Venkert, M. Aizenshtein, R. Arkush and N. Shamir 231 (1996) 254

Vanadium, Vanadium Alloys and Compounds
Radiation-induced segregation in neutron-irradiated V–Fe alloys studied by Mössbauer spectroscopy, V.V. Bogdanov and V.V. Zakurkin 231 (1996) 162
Annealing of radiation-induced defects in vanadium and vanadium–titanium alloys, T. Leguey, R. Pareja and E.R. Hodgson 231 (1996) 191

Wastes
Container materials in environments of corroded spent nuclear fuel, F.H. Huang 231 (1996) 74
Energy-recoil analysis of deuterium incorporated in Synroc by reaction with D_2O at 120 and 190°C [Comments on the paper by Hj. Matzke et al., Nucl. Instrum. Meth. B45 (1990) 194], N. Dytlewski, E.R. Vance and B.D. Begg 231 (1996) 257
Hydrogen profiles at the surface of leached Synroc [Authors' reply to 'Comments on the paper by Hj. Matzke et al., Nucl. Instrum. Meth. B45 (1990) 194'], Hj. Matzke and V. Rigato 231 (1996) 260

Zirconium, Zirconium Alloys and Compounds
Critical evaluation of uranium oxide dissolution by molten Zircaloy in different crucible tests, M.S. Veshchunov, P. Hofmann and A.V. Berdyshev 231 (1996) 1
Small angle X-ray scattering of small precipitates in Zircaloy, M. Uno, T. Kamiyama, H. Anada, C. Miyake and K. Suzuki 231 (1996) 34
Texture, morphology and deformation mechanisms in β-transformed Zircaloy-4, D. Ciurchea, A.V. Pop, C. Gheorghiu, I. Furtună, M. Todică, A. Dinu and M. Roth 231 (1996) 83
Hf impurity and vacancy interaction in α-Zr, R. Govindaraj and K.P. Gopinathan 231 (1996) 141
Hydride morphology and striation formation during delayed hydride cracking in Zr–2.5% Nb, G.K. Shek, M.T. Jovanović, H. Seahra, Y. Ma, D. Li and R.L. Eadie 231 (1996) 221